

research indicates that urban residents hold stronger environmental attitudes. A final residence-related characteristic may involve the length of time a person has lived in the area. For example, long time coastal residents could hold different attitudes than those who have recently moved to the coast.

Political party affiliation and orientation also likely influence environmental attitudes. Past research has shown that liberal political philosophy was positively related to environmental concern (Van Liere and Dunlap 1980). Environmental activism is also an important factor. This is usually assessed by determining organizational membership. In particular, active members of environmental groups likely hold stronger environmental attitudes than nonmembers. A similar pattern of relationship is anticipated with regard to contributions of money to environmental causes and attendance at public meetings.

To understand and influence attitudes and behavior, it is important to identify and analyze how people develop their beliefs and attitudes about the environment (Heberlein 1981). People obtain information from a number of sources, including the mass media, interpersonal relationships (i.e., friends and family), and their own experience. Interpersonal influence plays an important role in shaping attitudes and behavior (Rogers 1983). The mass media may not directly change attitudes, but rather will identify problems and help determine what topics are considered important or part of the public agenda. We analyze the frequency of use and importance of different sources of information the public has used relative to environmental issues in general and the Albemarle-Pamlico Estuarine system in particular. Sources include mass media, interpersonal sources, and formal organizations. Respondents also rate the usefulness and credibility of the various sources.

### Review of Related Research in Other Estuary Projects

The preceding section contained a review of the general nature of public attitudes and influences on public attitudes toward the environment. We now summarize selected results of surveys conducted by other estuarine programs. To better understand public perceptions of issues related to the Albemarle-Pamlico Estuarine System, we reviewed four studies of other estuarine systems. This review included analysis of surveys done for the Inland Bays Area of Delaware (Munda and Hastings 1987), the San Francisco Bay area (Battelle Ocean Sciences and Technology Division 1987), the Narragansett Bay Area of Rhode Island (Center for Environmental Studies 1987), and the Puget Sound of Washington State (Gilmore Research Group 1988). These estuary systems have large fishing and recreational industries. Each has recently confronted increased development due to its appeal for seasonal and full-time residence, commercial, and industrial needs. Because of the similar demands on these areas public perceptions in these systems should prove relevant to our current and proposed work.